Philosophy of Instructional Technology

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    Apps, Avatars, Blog, Texting, Cyberbully, Emoticon, Google, Moodle, Social Networking, 24/7, F2F, Mashup, Web 2.0, Tweet, Twitter, Unfriend, Wiki, Podcasting, 21st Century Skills; this sampling of new everyday words is an indicator of the changing world in which today's student is living.  An educator's responsibility has moved beyond simply teaching facts. In addition to mastery of their subject, educators have been teaching motivation, goal setting, self-regulation, compassion and tolerance.   Now with the advance of technology comes a new dimension.   
     Technology has altered the way teachers and students interact. New ways of teaching and new ways of learning are constantly evolving, intermixing the old with the new. However, as Prensky elegantly states, this is not enough; to truly benefit the student of the 21st century educators and schools must do "new things in new ways" (Prensky, 2006).  A change needs to occur from technology being used in schools to technology becoming an indistinguishable part of the learning.  Currently in the majority of schools technology isn't seamlessly infused in the learning process. Most often technology tools are being used for technology's sake and not the sake of learning. In his article *The Digital Curriculum* Abbey presents a vivid comparison of the integration of the use of a pencil to the use of computers.  A pencil is essentially a technological tool yet it is used daily in the classroom with no fanfare.  However students take notice of using the computer; it still involves a conscious use (Abbey). Infusing technology within the classroom should focus on assisting both the student and the teacher with the accomplishment of the learning goals and the instructional objectives. Technology needs to facilitate these accomplishments without distracting the attention of the student and the teacher from the matter at hand to be both justified and valuable.

Regardless of the technological advances motivation is still key to students' behavior and learning.  Motivation helps to direct goals, leads to increased effort, increases persistence, enhances cognitive processing and leads to improved performance (Ormrod 2006).  An effective educator must remain flexible and willing to introduce new ideas and methods in a manner that will utilize the students' talents and interests.    As always teachers have to be proficient at making a students’ learning experience both meaningful and engaging. The seamless integration of technology will allow students to learn in a constructivist environment. Abby defines a constructivist lesson as an educational experience where students create artifacts, products or authentic work from which they construct their own meaning (Abbey). They then can take these experiences, relate and translate them into real life 21st century skills. As the purpose and meaning of their work becomes clear to them, their motivation intensifies.

Educators also need to recognize that technology has created new definitions of what it means to be literate in today’s world.  For the 21st century learner, the "old school" definition of being literate is not enough. Students must develop their curiosity, creativity, communication skills and critical thinking. A partnership for 21st century skills emphasizes that students need to hone their learning and thinking skills to be truly literate in the new century.  In addition to learning academic content, students need to know how to keep learning throughout their lives. (Partnership, 2004).  They stress adding the four C’s to the three R’s in education as they further define learning and thinking skills to be comprised of:

* Critical Thinking and Problem Solving Skills
* Communication Skills
* Creativity and Innovation Skills
* Collaboration Skills
* Information and Media Literacy Skills

Taking literacy forward into these new skill sets is imperative to the future of these students. They need to learn to live in a world where information is instantly available and instantly changing. Educators need to teach students how to find relevant information, interpret it, own it and share it.

If all this was not enough; not only does an educator need to teach the skills to use technology, they must also teach the moral and ethical obligations which accompany it.  Teachers have always had a responsibility to be mentors and role models to students.  This accountability extends to the ethical use of technology. New technologies not only provide new educational opportunities they also provide new opportunities for undesirable behaviors, such as plagiarism (Williamson & Redish, 2009).

The exceptional educator will not only instruct, but they will enforce the students’ participation in appropriate procedures. Furthermore, they need to model the proper use of copyrighted materials. In addition to copyright issues are the fears of online safety. Again it falls with the educator to inform students of the dangers that exist out in the virtual world. While the schools may be successful blocking inappropriate material, students’ exposure outside school often is not as controlled. Therefore it is in the best interest of all to educate students of the possible dangers, so they may make educated decisions when on their own. With the introduction of the good and bad of technology educators must, more so than ever, maintain high expectations and strive to see students excel.

Educators should aspire to have a positive influence in the lives’ of their students, outside the classroom and beyond their school years.  As a trusted role model they should inspire motivation and appropriate social behavior, guiding them to become competent, compassionate individuals.   The love of learning provides a sound foundation for a child's life.  Those who have a love to learn tend to be well educated. Well educated people can make decisions that benefit both their own interests and the interests of society as a whole.

 What does this all mean for the future educator?  As summarized by Brown and Cato, Jr. "The solution: teachers must acquire and develop *technological pedagogical content knowledge*." (Colbert et al, 2008). This is an emerging form of knowledge from the interaction of content, pedagogy and technology knowledge. (Colbert et al, 2008). The indicator of an exceptional educator is one who masters their understanding of their content, understands how their students learn, and knows how to seamlessly incorporate technology to teach to the varying learning styles of their pupils.

There remain basic facts, regardless of the existence of technology or its proper use. Students learn differently and need the opportunities to express their learning in multifaceted ways.  Creating a rich and unique learning experience where students thrive require diverse approaches in both teaching and assessment. How fortunate is today’s educator in that they have all this wonderful 21st century technology to help make these goals a reality.

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